

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/011926

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, Sequence Search, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 03/061681 A (DEVELOGEN AKTIENGESELLSCHAFT FUER ENTWICKLUNGSBIOLOGISCHE FORSCHUNG; S) 31 July 2003 (2003-07-31) SEQ ID NO: 26, claims 16,23,24 claims 32-44 claims 51,52 claim 62 & DATABASE EMBL [Online] 14 January 2004 (2004-01-14), "Sequence 26 from Patent W003061681." retrieved from EBI accession no. EM PRO:AX960253 Database accession no. AX960253 ----- -/-</p>	<p>25-32, 43,44</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

25 May 2005

Date of mailing of the international search report

19-07-2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 01/18046 A (CORIXA CORPORATION; XU, JIANGCHUN; STOLK, JOHN, A) 15 March 2001 (2001-03-15) SEQ ID NO: 106 claims 29,31 claim 65 & DATABASE EMBL [Online] 30 March 2001 (2001-03-30), "Sequence 106 from Patent W00118046." retrieved from EBI accession no. EM_PRO:AX093288 Database accession no. AX093288</p>	<p>25-32, 43,44</p>
X	<p>WO 02/26820 A (NOVARTIS AG; NOVARTIS-ERFINDUNGEN VERWALTUNGSGESELLSCHAFT M.B.H; COHEN) 4 April 2002 (2002-04-04) pages 4-41 examples 2,4 claims 37-40 claims 68-81 claims 90-101</p>	<p>33,34</p>
X	<p>WO 02/057496 A (SOCRATECH L.L.C; THE UNIVERSITY OF ROCHESTER; ZLOKOVIC, BERISLAV, V; F) 25 July 2002 (2002-07-25) abstract</p>	<p>33,34</p>
A	<p>PALMERT M R ET AL: "Amyloid protein precursor messenger RNAs: differential expression in Alzheimer's disease." SCIENCE. 26 AUG 1988, vol. 241, no. 4869, 26 August 1988 (1988-08-26), pages 1080-1084, XP008047436 ISSN: 0036-8075 the whole document</p>	
A	<p>LORING J F ET AL: "A GENE EXPRESSION PROFILE OF ALZHEIMER'S DISEASE" DNA AND CELL BIOLOGY, NEW YORK, NY, US, vol. 20, no. 11, November 2001 (2001-11), pages 683-695, XP001083747 ISSN: 1044-5498 the whole document</p>	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>CHOW ET AL: "EXPRESSION PROFILES OF MULTIPLE GENES IN SINGLE NEURONS OF ALZHEIMER'S DISEASE" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 95, August 1998 (1998-08), pages 9620-9625, XP002100127 ISSN: 0027-8424 the whole document</p> <p style="text-align: center;">-----</p>	
A	<p>WELLS J M: "FUTURE DIRECTIONS IN THE ANALYSIS OF GENE EXPRESSION IN ALZHEIMER DISEASE" ALZHEIMER DISEASE AND ASSOCIATED DISORDERS, RAVEN PRESS, NEW YORK, NY, US, vol. 13, no. SUPPL 1, April 1999 (1999-04), pages S78-S81, XP009006178 ISSN: 0893-0341 the whole document</p> <p style="text-align: center;">-----</p>	
A	<p>DAVIES P ET AL: "CONSENSUS REPORT OF THE WORKING GROUP ON: MOLECULAR AND BIOCHEMICAL MARKERS OF ALZHEIMER'S DISEASE" NEUROBIOLOGY OF AGING, TARRYTOWN, NY, US, vol. 19, no. 2, 1998, pages 109-116, XP001148347 ISSN: 0197-4580 the whole document</p> <p style="text-align: center;">-----</p>	

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Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
25-34, 43, 44; all partially

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 25-34, 43, 44; all partially

Methods to identify modulators useful to treat, prevent or ameliorate neurodegenerative conditions comprising assaying for the ability of a candidate modulator to modulate the biochemical function or the gene expression of the protein of SEQ ID NO: 2. Pharmaceutical compositions comprising said modulators. Methods to diagnose subjects suffering from neurodegenerative conditions comprising assaying mRNA or protein levels of a protein of SEQ ID NO: 2 in a biological sample from said subject. Diagnostic kits comprising the polypeptide of SEQ ID NO: 2, polynucleotides encoding it, or antibodies directed against said polypeptide, or RNAi directed against said polynucleotides.

Inventions 2-20: claims 25-34, 43, 44; all partially

Methods to identify modulators useful to treat, prevent or ameliorate neurodegenerative conditions comprising assaying for the ability of a candidate modulator to modulate the biochemical function or the gene expression of the protein of SEQ ID NO: 2. Pharmaceutical compositions comprising said modulators. Methods to diagnose subjects suffering from neurodegenerative conditions comprising assaying mRNA or protein levels of a protein of SEQ ID NO: 4 in a biological sample from said subject. Diagnostic kits comprising the polypeptide of SEQ ID NO: 4, polynucleotides encoding it, or antibodies directed against said polypeptide, or RNAi directed against said polynucleotides.

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[idem. for each one of the even-numbered sequences listed in Table 3A]

Inventions 21-23: claims 25-34, 43, 44; all partially

Methods to identify modulators useful to treat, prevent or ameliorate neurodegenerative conditions comprising assaying for the ability of a candidate modulator to modulate the biochemical function or the gene expression of the fly protein CG4903. Pharmaceutical compositions comprising said modulators. Methods to diagnose subjects suffering from neurodegenerative conditions comprising assaying mRNA or protein levels of a fly protein CG4903 in a biological sample from said subject. Diagnostic kits comprising the fly protein CG4903, polynucleotides encoding it, or antibodies directed against said polypeptide, or RNAi directed against said polynucleotides.

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[idem. for fly genes CG14959 and CG6175 as listed in Table 3]

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03061681	A	31-07-2003	WO 03061681 A2	31-07-2003
			AU 2003274715 A1	22-12-2003
			WO 03103704 A2	18-12-2003
			AU 2003299314 A1	09-07-2004
			WO 2004054601 A2	01-07-2004

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			AU 7129700 A	10-04-2001
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			CA 2423613 A1	04-04-2002
			WO 0226820 A2	04-04-2002
			EP 1324652 A2	09-07-2003
			JP 2004509646 T	02-04-2004
			US 2002174446 A1	21-11-2002
			US 2005138676 A1	23-06-2005

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